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| 09/728,257 | 12/01/2000 | Chad Schoettger | P5402 | 3873 |

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EXAMINER

POLTORAK, PIOTR

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| ART UNIT | PAPER NUMBER |
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2134

DATE MAILED: 01/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/728,257

Applicant(s)

SCHOETTGER, CHAD

Examiner

Peter Poltorak

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/17/05.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-11,13,14,16 and 18-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-11,13,14,16 and 18-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-3, 5-11, 13-14, 16, 18-21 have been examined.
2. The Amendment, and remarks therein, received on 10/17/05 have been entered and carefully considered.
3. The Amendment introduces a new limitation into the originally sole independent claims 1, 10 and 16.
4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.

Response to Amendment

5. Applicant's arguments have been carefully considered but they were not found persuasive.
6. Applicant essentially argues a newly introduced limitation presented in claim 1, 10 and 16. Specifically applicant argues that the art of record does not teach replacing identification information for the computer device with information for the tunnel mechanism.
7. The examiner points out that *Birrell et al.* teach a tunnel mechanism between a host (*client*) and a computer device (*private resources*), wherein the tunnel mechanism is in communication with the host and the computer device (*Fig. 1*).
8. Specifically *Birrell et al.* teach that the proxy server 143 forwards the authenticated request 210 to the specified resource 160 inside the firewall 130 using the non-secure HTTP protocol. The resource 160 replies to the request with, for example

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private data, in message 211. The proxy server 143 then forwards the data, using secure HTTPS protocol, in a message 212 (step 380) (*col. 4 lines 52-57*).

9. Thus it is clear that as far as the external client is concern the response appears to originate from the tunnel mechanism (identified by URL: HTTPS:// ...) while actually the originating internal device's address (the external device can not access the internal device directly) is HTTP://

10. Also, *Birrell et al.* provides alternative addressing scheme between the external client, the tunnel and the internal device. In this embodiment, as applicant noted, the source information is encoded. However, the examiner points out that not only the original information is encoded but they are also replaced (*"the entire original URL is encoded in the remainder of the redirected URL"*, *col. 5 lines 5-12*)

11. Thus *Birrell et al.* provides two possible embodiments and both of them clearly show that as far as the external client is concern the party receiving and responding to the requests from an external client is the tunnel mechanism and that the computer device is hidden from the external client.

12. Also, as discussed above, the tunnel communicates with the internal device using the non-secure protocol (URL starting: Http:) and replace the protocol to the secure while communicating with the external client (URL: Https:), which reads on the internal identification information for the internal device are replaced with the identification information for the tunnel mechanism prior to transmittal of the modified response to the external client device.

13. In regard to *Bal et al.*'s teaching the examiner points out that *Bal et al.*'s invention utilizes a network address translation (interpreted as a tunnel mechanism). The network address translation inherently changes information of the source with identification information of the network translation (*changes external addresses to internal addresses and internal to external addresses, pg. 3 line 54-58 and col. 4 lines 25-50*).

14. Claims 1-3, 5-11, 13-14, 16, 18-21 have been examined.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claims 1-3, 5-6, 10-11, 13-14, 16 and 18 remain rejected under 35 U.S.C. 102(b) as being anticipated by *Birrell et al.* (U.S. Patent No. 5805803).

16. As per claims 10-11 and 14 *Birrell et al.* teach receiving with a tunnel mechanism an access request from the external client device to the internal network device, the tunnel mechanism being communicatively linked to an interface of the internal device, and on verifying that the external device is currently authenticated as an authorized user (*Fig. 1 and col. 4 lines 47-54*), modifying the access request to include an address of the interface of the internal device and on operating the tunnel

mechanism to route the modified access request to the interface of the internal device and modifying the response with the tunnel mechanisms to-replace identification information for the internal device with identification information for the tunnel mechanism prior to transmittal of the modified response to the external client device, wherein the identification information includes URL information for the internal device and response modifying includes replacing the internal device URL information with URL information for the tunnel mechanism, whereby the internal device is hidden from the external client device with the response appearing to originate from the tunnel mechanism (*col. 4 line 65- col. 5 line 12*).

17. Claims 1-3, 5-6, 16, 18 are substantially equivalent to claims 10-11 and 14; therefore claims 1-3, 5-6, 16, 18 are similarly rejected.

18. As per claim 13 *Birrell et al.* teach that the object 150 in Fig. 1 represents intranet, which comprises multiple web servers (*col. 3 lines 17-18*).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. Claims 7, 19-21 remain rejected under 35 U.S.C. 103(a) as being unpatentable over *Birrell et al.* (U.S. Patent No. 5805803) in view of *Dennis et al.* (U.S. Patent No. 5913922).

20. *Birrell et al.* teach a communication the response transmitted to the external device as discussed above.

Birrell et al. do not explicitly teach examining the response for an error message, translating the error message, and including the error message in the response transmitted to the external client.

21. *Dennis et al.* teach examining the response for an error message, translating the error message, and including the error message in the response (*Dennis et al.*, Fig. 4, col. 4 lines 38-47).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to examining the response for an error message, translating the error message, and including the error message in the response transmitted to the external client as taught by *Dennis et al.* One of ordinary skill in the art would have been motivated to perform such a modification in order to inform the user about the error (*Dennis et al.* col. 4 line 45).

Not including identification information for the interior device in the modified response would be implicit.

22. Claim 8 remains rejected under 35 U.S.C. 103(a) as being unpatentable over *Birrell et al.* (U.S. Patent No. 5805803) in view of *Berstis et al.* (U.S. Patent No. 6092100). *Birrell et al.* teach a communication the response transmitted to the external device as discussed above.

Birrell et al. do not explicitly teach examining the response for an error message, translating the error message, and operating the tunnel mechanism to take

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corrective actions to remove the error message from the response from the computer device.

23. *Berstis et al.* teach examining the response for an error message, translating the error message, and taking corrective actions to remove the error message from the response from the computer device (*Berstis et al. col. 2 lines 43-47*).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement examining the response for an error message, translating the error message, and taking corrective actions to remove the error message from the response from the computer device as taught by *Berstis et al.* One of ordinary skill in the art would have been motivated to perform such a modification in order to intelligently resolve an incorrect URL requests (*Berstis et al. col. 1 lines 64-66*).

24. Claim 9 remains rejected under 35 U.S.C. 103(a) as being unpatentable over *Birrell et al.* (U.S. Patent No. 5805803) and in view of *Flyntz et al.* (U.S. Patent No. 6351817).

25. *Birrell et al.* teach verifying authentication as discussed above.

Birrell et al. do not explicitly teach the verifying including determining a level of the authorized access and, the routing including limiting the access request to the computer device to the determined level of the authorized access.

26. *Flyntz et al.* teach verifying including determining a level of the authorized access (*Flyntz et al. col. 1 lines 31-36*).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to include determining a level of the authorized access when verifying as

taught by *Flyntz et al.* One of ordinary skill in the art would have been motivated to perform such a modification in order to make it impossible for an authorized user at one security level to access data at a security level for which he is not authorized (*Flyntz et al. col.1 lines 36-38*).

27. *Flyntz et al.* provides a clear suggestion that requests will be routed according to the level of requester's security, therefore, It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to include in routing the limiting the access request to the computer device to the determined level of the authorized access. One of ordinary skill in the art would have been motivated to perform such a modification in order to enforce the verification.

28. Claims 1-3, 5, 16 and 18 remain rejected under 35 U.S.C. 103(a) as being unpatentable over *Bal et al.* (U.S. Patent No. 6457061) and in further view of *Stein* (Lincoln D. Stein, "Web Security, "A step-by-step reference Guide, ISBN 0-201-63489-9, 1998) and in further view of *Flyntz et al.* (U.S. Patent No. 6351817).

29. *Bal et al.* teach a tunnel mechanism (*network address translation*) that changes external addresses to internal addresses and internal to external addresses (*pg. 3 line 54-58 and col. 4 lines 25-50*). *Bal et al.* also teach a method for providing an external client (*Fig. 2, Internet 100 node*) with selective access to a computer device (*Fig. 2, LAN 140 node*) protected behind a host (*Fig. 2, object 230*). Tunnel mechanism is in communication with the host and the computer device. The tunnel

mechanism receives an access request to the computer device from the external client as lines 9-13 col. 4 show that all the communication passes through the tunnel mechanism and as Fig. 2 shows the tunnel mechanism implemented on the host. Thus each request from an external client directed to a computer device is received by the tunnel mechanism before reaching the destination.

30. *Bal et al.* do not teach the tunnel mechanism being communicatively linked to the firewall (pg. 387).

Stein teaches firewalls. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement a firewall system into *Bal et al.*'s invention as taught by *Stein*, which would read on the tunnel mechanism being communicatively linked to the firewall. One of ordinary skill in the art would have been motivated to perform such a modification in order to prevent network attacks (*Stein* pg. 387).

31. *Bal et al.* do not teach verifying whether the external client currently has authorized access to the host.

32. *Stein* teaches verifying whether an external client currently has authorized access to the host (*Stein, Access Control Based on User Name and Password*, pg. 255-261).

33. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention include verification whether an external client currently has authorized access to the host as taught by *Stein* for motivation of benefit of increased security.

34. Claims 7, 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Bal et al.* (U.S. Patent No. 6457061) in view of *Stein* (Lincoln D. Stein, "Web Security, "A

step-by-step reference Guide, ISBN 0-201-63489-9, 1998) and Flyntz et al. and in further view of Dennis et al. (U.S. Patent No. 5913922).

35. *Bal et al.* in view of *Stein* and in further view of *Flyntz et al.* teach a method as discussed above.

Bal et al. in view of *Stein* and in further view of *Flyntz et al.* do not explicitly teach examining the response for an error message, translating the error message, and including the error message in the response transmitted to the external client.

36. *Dennis et al.* teach examining the response for an error message, translating the error message, and including the error message in the response (*Dennis et al., Fig. 4, col. 4 lines 38-47*).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to examining the response for an error message, translating the error message, and including the error message in the response transmitted to the external client as taught by *Dennis et al.* One of ordinary skill in the art would have been motivated to perform such a modification in order to inform the user about the error (*Dennis et al. col. 4 line 45*).

Not including identification information for the interior device in the modified response would be implicit.

Conclusion

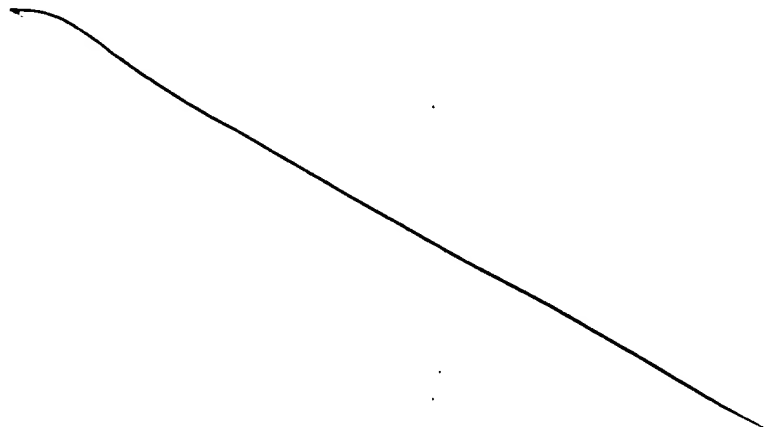
Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Poltorak whose telephone number is (571)272-3840. The examiner can normally be reached Monday through Thursday from 9:00 a.m. to 4:00 p.m. and alternate Fridays from 9:00 a.m. to 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on (571) 272-3838. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

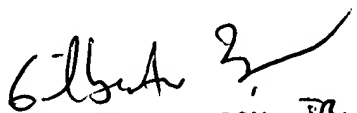


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Signature

1/6/6
Date


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